

AMENDMENTS TO THE CLAIMS:

The listing of claims below will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for ~~demodulating~~ downconverting ~~narrowband signals from a received signal~~ having wideband and a narrowband signal components, the system comprising:

a single downconverter operative to downconvert the wideband and narrowband signal components of the received signal; and

a baseband processor in electrical communication with the downconverter, the baseband processor being operative to decode the narrowband signal component from the downconverted received signal.
2. (Currently Amended) The system of Claim 1 wherein the single downconverter comprises at least one analog to digital converter operative to convert the received signal to a digital signal.
3. (Currently Amended) The system of Claim 2 wherein the single downconverter ~~is comprises at least one a single~~ demodulator operative to demodulate the received signal into two signals shifted in phase.

4. (Currently Amended) The system of Claim 3 wherein the single demodulator is a quadrature demodulator operative to demodulate the received signals shifted in phase.

5. (Currently Amended) The system of Claim 4 wherein the single downconverter comprises a mixer operative to mix the received signal prior to demodulation.

6. (Currently Amended) The system of Claim 5 wherein the single downconverter further comprises an amplifier operative to increase the gain of the received signal prior to demodulation.

7. (Currently Amended) The system of Claim 1 further comprising an antenna in electrical communication with the single downconverter and operative to detect the received signal.

8. (Original) The system of Claim 1 wherein the baseband processor is configured to filter the received signal into a wideband channel and a narrowband channel.

9. (Original) The system of Claim 1 wherein the baseband processor is operative to decode a narrowband signal having a bandwidth of about 30 kHz.

10. (Currently Amended) The system of Claim 1 wherein the baseband processor is operative to decode the wideband signal[[s]] component as well as the narrowband signal[[s]] component.

11. (Currently Amended) The system of Claim 10 wherein the narrowband signal[[s]] component has[[ve]] a bandwidth of about 30 kHz and the wideband signal[[s]] component has[[ve]] a bandwidth of about 200 kHz.

12. (Currently Amended) A method of ~~demodulating downconverting~~ narrowband signals from a received signal having wideband and narrowband signal components with a single downconverter and a baseband processor, the method comprising the steps of:

- a) downconverting the wideband and narrowband signal components of the received signal with the single downconverter; and
- b) decoding the narrowband signal component from the received signal with the baseband processor.

13. (Currently Amended) The method of Claim 12 wherein step (b) further comprises decoding ~~[[a]]~~ the wideband signal component from the received signal with the baseband processor.

14. (Original) The method of Claim 13 wherein step (b) comprises decoding narrowband signals having a bandwidth of about 30 kHz and wideband signals having a bandwidth of about 200 kHz.

15. (Original) The method of Claim 12 wherein step (a) comprises converting the received signal to a digital signal with an analog to digital converter.

16. (Currently Amended) The method of Claim 15 wherein step (a) comprises demodulating the received signal with a single quadrature demodulator prior to converting the signal to a digital signal.

17. (Currently Amended) The method of Claim 16 wherein step (a) comprises mixing the received signal prior to demodulation with the single quadrature demodulator.

18. (Original) The method of Claim 17 wherein step (a) comprises amplifying the received signal prior to mixing.

19. (Original) The method of Claim 18 wherein step (a) comprises detecting the signal prior to amplification.

20. (Currently Amended) A ~~wireless wideband~~ single receiver operative to receive a received signal having both at least one 200kHz (wideband) and narrowband signal components~~channel~~, the receiver comprising:

an antenna operative to detect a received signal having both wideband and narrowband signal components;

a switch filter in electrical communication with the antenna, the switch filter being operative to switch between the received signal and a transmitted signal;

an amplifier in electrical communication with the switch filter, the amplifier being operative to increase the gain of the received signal;

a mixer in electrical communication with the amplifier, the mixer being operative to mix the received signal with a radio frequency oscillation signal;

a single demodulator in electrical communication with the mixer, the single demodulator being operative to demodulate the received signal with an intermediate frequency oscillation signal;

an analog to digital converter in electrical communication with the single demodulator, the analog to digital converter being operative to convert the received signal to a digital signal; and

a baseband processor in electrical communication with the analog to digital converter, the baseband processor being configured to decode the narrowband signal component ~~channel~~ from the received signal.

21. (Currently Amended) The receiver of Claim 20 wherein the baseband processor is further configured to decode ~~[[a]]~~ the wideband signal component.

22. (Original) The receiver of Claim 21 further comprising a radio frequency phase lock loop in electrical communication with the mixer, the radio frequency phase lock loop being operative to generate the radio frequency oscillation signal.

23. (Currently Amended) The receiver of Claim 22 further comprising an intermediate frequency phase lock loop in electrical communication with the single demodulator, the intermediate frequency phase lock loop being operative to generate the intermediate frequency oscillation signal.

24. (Currently Amended) The receiver of Claim 23 wherein the single demodulator is a quadrature demodulator operative to demodulate the received signal into two demodulated signals having quadrature phase.

25. (Original) The receiver of Claim 24 wherein the analog to digital converter comprises two analog to digital converters operative to convert the two received signals to digital signals.

26. (Currently Amended) The receive of Claim 25 wherein the wideband signal component~~channel~~ has a bandwidth of about 200 kHz and the narrowband signal component~~channel~~ has a bandwidth of about 30 kHz.

27. (Currently Amended) A system for receiving ~~narrowband signal from a~~ received signal having wideband and narrowband signal components, comprising:
means for demodulating the wideband and narrowband signal components of the received signal;
means for converting the received signal to a digital received signal; and
means for decoding the narrowband signal component from the digital received signal.

28. (Currently Amended) The system of Claim 27 wherein the means for decoding the narrowband signal component is configured to additionally decode the wideband signal~~[[s]]~~ component.

29. (Currently Amended) The system of Claim 28 wherein the means for decoding the narrowband and wideband signal[[s]] components is a digital baseband processor.

30. (Currently Amended) The system of Claim 29 wherein the means for demodulating the received signal is a single demodulator.

31. (Currently Amended) The system of Claim 30 wherein the single demodulator is a quadrature demodulator.

32. (Original) The system of Claim 31 wherein the means for converting the received signal to a digital received signal is an analog to digital converter.

33. (Currently Amended) The system of Claim 32 wherein the narrowband signal[[s]] component has[[ve]] a bandwidth of about 30 kHz and the wideband signal[[s]] component has[[ve]] a bandwidth of about 200 kHz.